

## A FEW NEW COLEOPTERA OF THE GENUS BITOMA, WITH NOTES ON OTHER COLYDIIDÆ.

By CHAS. SCHAEFFER.

This paper is based largely on the material in the genus *Bitoma* contained in the Hubbard & Schwarz collection of Coleoptera in the U. S. National Museum. Through the kindness of Mr. Schwarz I have been enabled to study this material, and, as will be seen in the following pages, several of the species have proved to be new. Among the material sent me by Mr. Schwarz are two more species which are apparently new, but as I was unable to find a good structural character to separate them from their nearest allies, and as they were represented by single specimens only, I leave these for the future, when more material will be available.

The sculpture of the metasternum of most of our species of *Bitoma* may be called granulose. In some species the granules are distinct, but slightly elongated; in others they are longitudinally confluent, giving the surface a strigose appearance which is especially strongly pronounced in *ornata*, *quadriguttata* and *pinicola*, but in *vittata* more feebly and the granules hardly confluent. In *discolor* the sculpture of the metasternum is feeble, but slightly more distinct than in *prosopis* and *suffusa*.

The sculpture of the elytral intervals in pale specimens looks at first entirely different than in dark specimens of the same species; this is rather misleading, especially as in certain species the sculpture in dark specimens is more difficult to make out clearly than in pale specimens.

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9. Reddish testaceous, head and thorax darker, elytral intervals on each side with one row of tubercles, leaving at middle a narrow longitudinal, nearly smooth space.....*sulcata* LeConte.

## DESCRIPTIONS OF SPECIES.

**Bitoma vittata**, n. sp.

Elongate, thorax distinctly narrowing from apex to base, piceous, opaque, each elytron with a longitudinal reddish vitta not quite attaining the apex. Head granulate, finely and sparsely pubescent, ninth joint of antennæ not wider than the eighth. Thorax broader than long, distinctly narrowing to base, apical angles not prominent, side margins finely crenulate, disk with two costæ on each side, the inner not as distinct as the outer, surface granulate. Elytra distinctly broader than the thorax at base, with three discal and one submarginal costæ, which are sparsely pubescent with short pale hairs; intervals with two rows of tubercles, the two rows of tubercles separated by a nearly smooth, longitudinal median space. Metasternum not coarsely granulate, the granules slightly longitudinally confluent; abdomen feebly punctate and sparsely pubescent.

Length, 2.75 mm.

Brownsville, Tex., one specimen in the Hubbard & Schwarz collection, collected by Mr. E. A. Schwarz.

*Type*.—No. 10443, U. S. National Museum.

This species has the thorax more distinctly narrowing to base than any other species known to me, which character, together with the elytral sculpture and markings, makes it an easily recognizable species.

I have taken a specimen in Brownsville which is reddish testaceous, with suture and side margins slightly infusate, but which does not differ otherwise; this is evidently not fully colored yet.

### **Bitoma pinicola**, n. sp.

Elongate, depressed, form of *quadriguttatus* Say, but slightly broader, more depressed, the markings at best feebly defined and slightly different in position. Head opaque, black, paler at apex, granulate and very sparsely pubescent. Thorax broader than long, sides slightly arcuate, margins feebly crenulate, disk on each side with two costæ, the outer distinct, the inner feeble and obliterated near apex; surface granulate, piceous and scarcely pubescent. Elytra scarcely wider than the thorax, disk with four slightly elevated costæ, intervals with two rows of coarse punctures, which are scarcely confluent; color piceous, with four not very well defined red markings on each elytron, of which a narrow oblique humeral and an apical rounded spot are more visible than the two others; one of them is situated near side margin between the humeral and subapical spot and the other slightly below the subapical, the latter at about apical third. Body beneath and legs piceous; metasternum longitudinally strigose.

Length, 3 mm.

Lakehurst, N. J., on pine.

This species resembles *quadriguttatus*, but is broader, more depressed, the elytral sculpture not as coarse as in that species; the position of the subapical spot is different, which is in *quadriguttatus* oblique and slightly behind middle, in *pinicola*, when present, apparently rounded and at apical third and the thoracic costæ, especially the inner, are never as distinct as in *quadriguttatus*. In the type the markings can be traced and are as above described; in a few others the markings are either absent or only the humeral and subapical can be feebly seen.

### **Bitoma discolor**, n. sp.

Elongate, depressed, opaque, pale rufotestaceous; head, thorax, four spots, and apex of elytra darker. Head finely granulate, sparsely pubescent; antennæ with ninth joint not wider than eighth. Thorax

nearly as long as broad, feebly narrowing to base, apical angles distinct, basal angles rectangular, base feebly lobed, side margins irregularly crenate, disk with four costæ as in *quadriguttatus*, surface granulate. Elytra slightly wider than the thorax at base, with the usual four costæ, which are very prominent and slightly crenate at their summit; intervals with two rows of well separated round perforate punctures, separated by a broad, nearly smooth, longitudinal median line; color rufotestaceous, with darker markings as follows: One at scutellum, one slightly below middle at suture, one on each side near side margin, between the scutellar and sutural spot and apex more or less piceous. Metasternum and abdomen obsoletely punctate and sparsely pubescent.

Length, 2.75-3 mm.

Biscayne Bay and Key West, Fla.; Cayamas, Cuba. For the Biscayne Bay specimens I am indebted to Mrs. A. T. Slosson; the Key West and Cayamas specimens were collected by Mr. E. A. Schwarz.

*Type*.—No. 10445, U. S. National Museum.

The apical dark elytral space is variable in extent and is connected in some specimens with the marginal spots. The elytral spots in some specimens are darker than in others. The coloration, as well as the sculpture, distinguishes this species readily from any of our species.

### ***Bitoma prosopis*, n. sp.**

Elongate, piceous, opaque, sparsely pubescent; elytra with four not clearly defined reddish spots, two occupying basal third, leaving suture and sides narrowly piceous and two near apex. Head nearly smooth, opaque, sparsely pubescent; antennal club two-jointed; clypeus covering the mouth parts. Thorax slightly broader than long, apex and base equal, feebly arcuate at sides, side margin finely crenulate, the inner of the two lateral costæ nearly obsolete, disk finely granulate and sparsely pubescent. Elytra very little wider than the thorax at base, with four elevated discal costæ, which on their summit are slightly crenulate and clubbed with short white hairs; intervals with rows of large coarse punctures, more or less transversely confluent, giving them a rugulose appearance. Body beneath ferruginous, opaque; metasternum and abdomen feebly punctate and sparsely pubescent.

Length, 2 mm.

Two specimens, one from New Braunfels, Tex., in Coll. Dietz, the other from San Diego, Tex., in the Hubbard and Schwarz collection, U. S. Nat. Museum; the latter was collected May 23 by Mr. E. A. Schwarz, whose manuscript name I have used.

*Type*.—No. 10444, U. S. National Museum.

This species can only be compared with the darker specimens of *suffusa* Casey, from which it principally differs in smaller size, coarser sculpture of the elytral intervals, and longer clypeus, which covers the mandibles completely, the latter always more or less visible in *suffusa*.

#### **Bitoma suffusa** Casey.

Mr. Schwarz is of the opinion that this species is synonymous with *gracilis* Sharp. This view is very likely correct, but the description is not sufficient to identify the insect with certainty, and as some of the species are very close I retain for the present Casey's name for this species.

A few specimens before me, collected by Mr. Schwarz in Yuma, Ariz., are slightly larger, darker in color, and in some the sculpture of the intervals is coarser, but I am not able to find at present a good character to separate these from the lighter colored specimens.

#### **Phlæonemus catenulatus** Horn.

*P. adharens* Sharp.

Mr. Schwarz suggested the above synonymy to me. The description and excellent figure of the Guatemalan insect agree so well in every respect with our species that there is no doubt of the correctness of this view. A few specimens occurred at Brownsville, Tex., with the typical form, with which they agree in every respect except that the elytral costæ are several times interrupted; these may be Reitter's *interruptus*, which is said to be 7 mm. long, while my largest specimen is 5 mm.

#### **Lithophorus succineus** Pasc.

I bred a few specimens of this fine species from branches of *Acacia flexicaulis*, and also obtained some by beating. The genus *Lithophorus* is a member of the tribe Bothriderini and differs principally from the two genera in our fauna by the form of antennæ; the joints 7, 8, and 9 slightly increasing in width, 10th much larger than the 9th, 11th very small, hardly visible. The species is black, nearly of the form of *Bothrideres geminatus*, but larger and more convex; thorax uneven, with a depression at middle and tuberculate at sides, the third and fifth elytral intervals with interrupted costæ, each costa at middle with a transparent yellow spot, "like a jewel or piece of amber," as Dr. Sharp so aptly describes them; at sides and apex are a number of tubercles and granulations.

**Lobogestoria gibbicollis** Reitter.*Aditoma bifida* Casey.

Looking over some Cuban coleoptera in the National Museum with Mr. Schwarz, I recognized in *Lobogestoria gibbicollis* what I had identified as *Aditoma bifida*. Mr. Schwarz kindly gave me a Cuban specimen for comparison with my insect, which is from Louisiana, but I was unable to find any character to separate the two. Reitter described his species as a lathridiid on account of the three-jointed tarsi, of which no mention was made by Major Casey in the description. Casey's specimen came from Florida.

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**A WONDERFUL NEW BEETLE OF THE GROUP COPRIS.**

By EDWARD A. KLAGES.

**Tetramereia**, n. gen.

Form rounded; legs strong. Head clypeate; thorax wider than long, broadest before middle; elytra subtruncate; metasternum rhomboidal (as in *Phanæus* MacLeay), not projecting anteriorly (a character of *Oxysternon* Castelnau). Antennæ nine-jointed, the first joint of the club roundly infundibulate and receiving the others. Tarsi four-jointed, widely flattened, edged with moderately short, stiff hairs, and with the superior surface inclined toward the center of the body; the first joint as long as the rest of the foot, the second joint half as long as the first, the third joint scarcely longer than the fourth; the first three joints as wide as long and somewhat reniform; the claws and anterior tarsi wanting. Fore tibiæ with a movable, terminal spine and with the outer edge toothed; the hind tibiæ with a single terminal spine, the middle and hind tibiæ expanding to apex.

*Type*: The following species:**Tetramereia frederickii**, n. sp.

Brown-black; head and thorax rather densely punctured, becoming rugose on front; clypeus emarginate, with two rounded teeth; thorax with median lateral impression, and with the basal portion feebly impressed on medial line; elytra rather deeply striate and finely punctured; front tibiæ four-dentate, the outer three teeth large.

Length, 15 mm.